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EXAMINER

DEHLING, G

ART UNIT

PAPER NUMBER

23

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2608

DATE MAILED:

08/26/94

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 5-23-94 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 86-176 are pending in the application.
Of the above, claims 176 are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 86-175 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been. ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation):
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

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1. Newly submitted claim 176 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 176 is drawn to a method of transferring information from an RF receiver to a processor wherein claims 86-175 are drawn to a system and method of transmitting electronic mail from an originating processor to a destination processor through an electronic mail system and an RF transmission network. Claims 86-175 (which are similar in scope to originally presented claims 1-85) are not directed to the particular details of transferring information from the RF receiver to the destination processor, and further, the method as set forth by claim 176 has separate utility in other applications than those of electronic mail systems. Therefore, claim 176 is distinct from claims 86-175 and thus would require a further search.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 176 is withdrawn from consideration as being directed to a non-elected invention. See 37 C.F.R. § 1.142(b) and M.P.E.P. § 821.03.

2. Claims 87-92, 103-119, 121-126, 137-152, and 154-165 are rejected under 35 U.S.C. § 112, second paragraph, as being

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indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Consider claims 103, 137, 173, and 175. The phrases "transmitting the originated information with the RF transmission network" and "transmitting other originated information with the electronic mail system" are unclear.

Consider claims 87, 104, 121, and 138. It is not clear how the one interface switch removes information to the originated information. Further, in claim 104, lines 5 and 6, the phrase "transmission of the originated information to the originated information to the at least one RF receiver" is confusing.

Consider claims 88, 90, 105, 107, 121, 124, 138, and 140. It is unclear whether the claimed "other information" is the same as or different from the "other information" (in the independent claims) which is transmitted over the telephone network.

3. Claim 152 is rejected under 35 U.S.C. § 112, fourth paragraph, as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 152, which is dependent upon claim 150, is an exact duplicate of claim 150. Therefore, claim 152 fails to further limit claim 150.

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

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A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

5. Claims 86-175 are rejected under 35 U.S.C. § 103 as being unpatentable over Zabarsky et al.

Consider claims 86, 103, 120, 137, and 172-175. Zabarsky et al. disclose a system in figures 1, 2, and 6 for transmitting information from one of a plurality of originating processors (paging unit 106 or external terminal 104) in an electronic mail system to one of a plurality of destination processors in the electronic mail system. The system comprises a gateway switch in the electronic mail system (paging executive PEX 212) which stores the originated information prior to transmission of the information to the destination processor; an RF transmission network (base transceivers 200-202) for transmitting the information to an RF receiver (1025) within the destination processor (106); an interface switch (network control processor NCP 204) which connects the gateway switch (212) to the RF

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transmission network (200-202) and transmits the information from the gateway switch to the RF transmission network; and the electronic mail system transmits other originated information from an originating processor (104) to a destination processor (106) through a telephone network (note col. 4, lines 40-45). Zabarsky et al. further disclose that the originated information is accompanied with an address of the destination processor which can be added by the originating processor (note the bridge of cols. 13 and 14).

Zabarsky et al. differ from the mentioned claims in that they fail to specifically disclose that an address of the interface switch (NCP) is added to the originated information in order to transmit the originated information to the proper interface switch (NCP). However, Zabarsky et al. do disclose in col. 6, lines 54-61 that the gateway switch (PEX) stores designations of selected NCPs and base transceivers which are associated with a particular destination processor, i.e. the destination processor resides in the coverage area of the NCP and base transceiver. Thus, it would have been at least obvious, if not inherent, to add the designations (addresses) of the NCP and base transceivers, which are associated with the particular destination processor, to the originated information such that the information is properly routed to and received by the destination processor.

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Consider claims 87, 104, 121, and 138. Although not disclosed by Zabarsky et al., it is well known in the art when routing a message from an origination point to a destination point, to remove previously used addresses and add new addresses of intervening points between the origination and destination points. It would have been obvious to one of ordinary skill in the art to implement this known technique in Zabarsky et al. such that addresses which are no longer required for routing of the message are deleted from the message, thereby reducing the size of the transmitted message.

Consider claims 88-91, 105-108, 122-125, and 139-142. The address of the destination processor is an identification number of the RF receiver which is contained within the destination processor. Further, although Zabarsky et al. do not specifically disclose that the interface switch assembles the originated information into a packet, data packet transmission is very well known in the art, as evidenced by Zabarsky et al. which transmits data packets amongst the data packet switches (214) between the different systems (100, 600, and 602). It is also well known that once the data packet is received at a destination point, to disassemble the packet and route each of the plurality of data to its particular destination (evidence has already been provided in the record). Since Zabarsky et al.'s system has multiple users, it would have been obvious to one of ordinary skill in the art to

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use the well known packet transmission technique between the interface switch and RF transmission network to efficiently transmit the plurality of originated information corresponding to the different users of the system.

Consider claims 92, 109, 126, and 143. As discussed previously, Zabarsky et al. teach transmission of a data message through the telephone network when the external terminal (104) is coupled to the PSTN. Although Zabarsky et al. does not specifically disclose that different addresses are used by the RF transmission network and the telephone network, it is known in the communication art for different networks to use different identifications for the same destination unit. That is, in cellular telephony, a cellular telephone can have several identification numbers with each identification number being associated with a different cellular network. Thus, it would have been obvious to use different identifications such that the network, through which the information originated, can be identified.

Consider claims 93, 94, 102, 110, 111, 119, 127, 128, 136, 144, 145, and 153. As discussed previously, with the modification to Zabarsky et al., the address of the interface switch (NCP) is added to the originated information to properly route the information to the destination processor associated with the NCP. Although, Zabarsky et al. do not disclose that the

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address of the interface switch is added to the originated information by the originating processor, the point at which the address of the interface switch is added lacks criticality providing that it is added prior to the interface switch in the hierarchial routing structure of the system. Thus, it would have been obvious to add the interface switch address at the originating processor or at any other point in the route prior to the particular interface switch lacking any criticality or showing by applicant since this information would not be necessary until the point in the route just prior to the interface switch.

Consider claims 95-98, 112-115, 129-132, 146-149. Zabarsky et al. disclose that the address of the destination processor contains a 4-digit identification number of the RF receiver (contained within the destination processor) and that this identification is input at the originating processor (note, fig. 11, step 1114). Although, Zabarsky et al. disclose the identification of the RF receiver to be added at the originating processor, as was previously discussed above, it would have been obvious to add the identification of the RF receiver at any intermediate point before the RF receiver lacking any criticality or showing by applicant since this identification information would not be necessary until the point in the route just prior to the RF receiver.

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Consider claims 99-101, 116-118, 133-135, and 150-152. Zabarsky et al. disclose storing a cross reference between the identifications of the various destination processors to the identifications of the PEXs, NCP, and base transceivers associated with the location of the destination processor.

Consider claim 154. Zabarsky et al. disclose that the originated information can be stored at the RF receiver/destination processor.

Consider claims 155 and 156. The RF receiver and destination processor, as depicted in figure 10, are portable.

Consider claims 157-159. At the bridge of cols. 4 and 5, Zabarsky et al. disclose that the RF receiver can be separate from the destination processor. Further, it is inherent that the destination processor cannot receive the information until the RF receiver is coupled to the destination processor since the information is being transmitted via RF.

Consider claims 160 and 161. It would have been at least obvious, if not inherent, to include the necessary software to transfer the originated information to the destination processor such that the information is accessible to the user.

Consider claims 162-171. The transmission of the originated information from the originating processor to the interface switch is through a computer, modem, a public telephone network, and gateway switch when the originating processor is the external

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terminal (104). Further, private branch exchanges (PABX) and local area networks (LAN) are very well known communication systems and would have been obvious to include in the routing of the originated information to the destination processor if such networks are utilized by a user who is receiving the originated information.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The article "X.400 Breeds Third-Generation E-mail Systems", TPT (3-1989), vol. 7, no. 3, p. 34-7, by J. Morris is cited as evidence that, in a broad interpretation, the definition of an electronic mail system encompasses a radio paging system.

The following articles disclose transmission of electronic mail via radio:

a) "Data Communications on Cellular - The Office of Tomorrow in Your Car Today.", What Telephone and Communication News (10-1985), no. 14, p. 28-31.

b) "Cellular Radio", Computer Law and Security Report (1-1986), vol. 1, no. 5, p. 18-19.

c) "More Power to the Pager", Today's Office (7-1987), no.7, p.16-17.

d) "Get Me Memphis Tennessee (Cellular Communications)", Micro Decision (5-1989), no.95, p.50-4.

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e) "Tele-Laptop: Mobility As Deciding Competition Feature (RadioTelephone and Computer)", Funkschau (12-1989), no.26,p.35-6, 39.

f) "Electronic Mail Radio Pulse Shaper...", Revue Polytechnique (12-1989), no. 12, p. 1508-10.

7. Applicant's arguments filed 5/13/94 have been fully considered but they are not deemed to be persuasive.

Most of applicant's arguments are moot due to the new grounds of rejection applied to newly submitted claims 86-175, however, arguments pertaining to Zabarsky et al. will be addressed since this reference has been re-applied to the new claims.

(a) Applicant argues that Zabarsky et al. disclose a wireless system and do not disclose anything which constitutes an electronic mail system. Thus, according to applicant, Zabarsky et al. has been improperly applied in rejecting the claims of the present invention.

The examiner disagrees. According to the article "X.400 Breeds Third-Generation E-mail Systems", the author states:

"In its broadest definition, electronic mail encompasses communicating word processors, PCs, telex, facsimile, videotex, voice mail and radio paging systems (beepers)."

As clearly stated above, the radio paging system of Zabarsky et al. constitutes an electronic mail system in the broad sense.

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Therefore, since the examiner's interpretation is supported by one of ordinary skill in electronic mail systems, and since the examiner is entitled to give the broadest possible interpretation of the claims, it is reasonable to conclude that Zabarsky et al.'s wireless paging system does constitute an electronic mail system as opposed to applicant's narrow view of e-mail systems.

(b) The applicant cites column 2, lines 45-54 of Zabarsky et al. and concludes from this citation that Zabarsky et al. do not consider their wireless system to relate to electronic mail systems.

The portion of Zabarsky et al. applicant had cited is concerned with message notification in an e-mail service. Nowhere in this citation can it be found (nor can one reasonably conclude) that Zabarsky et al. do not consider their system to be an electronic mail system. If anything, this citation of Zabarsky et al. confirms that their system and electronic mail systems are directly related.

(c) Applicant argues that Zabarsky et al. clearly do not transmit originated information from one of a plurality of originating processors in the electronic mail system to at least one of a plurality of destination processors in the electronic mail system through a telephone network as recited in the claims.

Applicant is directed to column 4, lines 40-45 of Zabarsky et al., where they specifically state:

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"The central site 100 may be dialed like any other telephone number in the PSTN and an interconnect external terminal 104 may be used to create a data message designated by a unique identification address for each one of the many pagers 106 in the radio coverage area of the paging site."

And, as clearly illustrated in figure 1, the external terminal (originating processor 104) is directly coupled to the PSTN to originate a data message to be transmitted through the telephone network (PSTN) to the paging unit (destination processor 106).

(d) The applicant further argues that the elements of Zabarsky et al.'s system, which correspond to the claimed gateway and interface switch of the present invention, are within the wireless network and all the independent claims recite these elements outside of the wireless network.

The examiner directs the applicant's attention to figure 6 of Zabarsky et al. The examiner does not see any wireless transmission between the gateway (PEX) and interface switch (NCP). The only wireless transmission the examiner does see is the base transceivers (200-202) which the examiner is reading as the RF transmission network. Furthermore, it is noted by Zabarsky et al. that transmission between the data packet switch (214) need not necessarily be a radio link (608).

8. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P.

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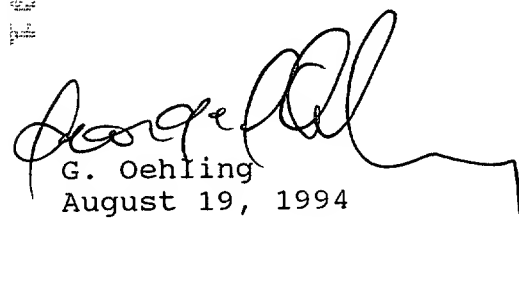
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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Oehling whose telephone number is (703) 305-4835.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.


G. Oehling
August 19, 1994


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
GROUP 2000